

What is claimed is:

1. A roller bearing assembly comprising:
first and second bearing races, the first bearing race having a first set of gear teeth and the second bearing race having a second set of gear teeth opposed to the first set of gear teeth;
a toothed gear positioned between the first and second bearing races and interengaging the first and second sets of gear teeth; and
a plurality of rollers positioned between the first and second bearing races wherein movement of one of the first or second bearing races causes movement of the gear which in turn causes movement of the other of the first or second bearing races.
2. The roller bearing assembly of claim 1 wherein the first bearing race has a first bearing surface in contact with the rollers and the second bearing race has a second bearing surface in contact with the rollers.
3. The roller bearing assembly of claim 2 wherein the first set of gear teeth are pierced through the first bearing surface and the second set of gear teeth are pierced through the second bearing surface such that the first and second sets of gear teeth do not interfere with the first and second bearing surfaces.
4. The roller bearing assembly of claim 2 wherein the first set of gear teeth extend from the first bearing surface toward the second bearing race and the second set of gear teeth extend from the second bearing surface toward the first bearing race.
5. The roller bearing assembly of claim 4 wherein the plurality of rollers includes at least one reduced diameter roller configured to travel between the first and second sets of gear teeth.

6. The roller bearing assembly of claim 2 wherein the first bearing race includes a first flange extending from the first bearing surface toward the second bearing race and the second bearing race includes a second flange extending from the second bearing surface toward the first bearing race in alignment with the first bearing race.

7. The roller bearing assembly of claim 6 wherein the first set of gear teeth are formed in the first flange and the second set of gear teeth are formed in the second flange.

8. The roller bearing assembly of claim 6 further comprising a third flange extending from the first bearing surface toward the second bearing race and spaced from the first flange and a fourth flange extending from the second bearing surface toward the first bearing race in alignment with the third bearing race and wherein the plurality of rollers are retained between the first and third flanges and between the second and forth flanges.

9. The roller bearing assembly of claim 8 wherein a retaining element is positioned between the first and second bearing races and the first and third flanges are crimped toward one another about the retaining element and the second and fourth flanges are crimped toward one another about the retaining element to retain the first and second bearing races together.

10. The roller bearing assembly of claim 8 wherein a first retention slot extends between the first flange and the first race surface, a second retention slot extends between the third flange and the first race surface, a third retention slot extends between the second flange and the second race surface, and a fourth retention slot extends between the fourth flange and the second race surface, and wherein a retaining element having four axially extending tabs is positioned between the first and second bearing races with each tab received in a respective one of the first, second, third and fourth retaining slots.

11. The roller bearing assembly of claim 10 wherein the retaining element includes a deflection slot adjacent each axially extending tab to provide for deflection of the tabs past the respective flanges during assembly.

12. The roller bearing assembly of claim 10 wherein the retaining element is configured to support a shaft that supports the gear.
13. The roller bearing assembly of claim 1 wherein the first and second bearing races are flat.
14. The roller bearing assembly of claim 1 wherein the first and second bearing races are arcuate.
15. The roller bearing assembly of claim 14 wherein the first and second bearing races each extend over an arc of approximately 180°.
16. The roller bearing assembly of claim 14 wherein the first and second bearing races each extend over an arc of approximately 360°.
17. The roller bearing assembly of claim 1 wherein the first bearing race has at least one location tab extending therefrom in a direction parallel to or away from the second bearing race.
18. The roller bearing assembly of claim 17 wherein the second bearing race has at least one location tab extending therefrom in a direction parallel to or away from the first bearing race.